

B<sup>1</sup>  
cont'd

compound semiconductors such as zinc selenide (ZnSe), zinc sulfide (ZnS) and zinc oxide (ZnO) may also be used.--

---

### IN THE CLAIMS:

Please amend claims 1, 3-5, 7, 8, 12, 13, 15 and 16. The amendments are based on Fig. 1 and the description of Fig. 1 in the present specification.

---

1. (Currently amended) A semiconductor laser device [characterized by] comprising:  
a resonant cavity [made up of a plurality of semiconductor layers] disposed between a n-type compound semiconductor layer and a p-type compound semiconductor layer at the main surface and the opposite surface, a light is emitted along the interfaces of the n-type compound semiconductor layer and the p-type compound semiconductor layer by applying a voltage to each compound semiconductor layer; and

a reflective film[, which contains niobium oxide and is formed on] adhered to an end facet of the resonant cavity,

wherein the reflective film is composed of a first dielectric layer and a second dielectric layer containing niobium oxide.

---

3. (Currently amended) The semiconductor laser device of Claim 1, [characterized in that] wherein the [semiconductor layers] n-type compound semiconductor layer and the p-type semiconductor layer are made of Group III - V nitride semiconductors.

4. (Currently amended) [A semiconductor laser device characterized by comprising:

a resonant cavity made up of a plurality of semiconductor layers; and

a reflective film, which is formed on an end facet of the resonant cavity and includes a first dielectric layer and a second dielectric layer having a refractive index greater than that of the first dielectric layer,

B3  
cont'd

the device being characterized in that the second dielectric layer is made of niobium oxide] The semiconductor laser device of Claim 1, wherein a refractive index of the second dielectric layer is greater than a refractive index of the first dielectric layer.

5. (Currently amended) The semiconductor laser device of Claim [4] 1, [characterized in that] wherein the first dielectric layer is made of silicon dioxide or aluminum oxide.

---

7. (Currently amended) The semiconductor laser device of Claim 4, [characterized in that] wherein the [semiconductor layers] n-type compound semiconductor layer and the p-type semiconductor layer are made of Group III - V nitride semiconductors.

---

B-1

8. (Currently amended) [A semiconductor laser device characterized by comprising:  
a resonant cavity made up of a plurality of semiconductor layers; and  
a reflective film, which is formed on an end facet of the resonant cavity by alternately stacking first and second dielectric layers, each said second dielectric layer having a refractive index greater than that of the first dielectric layers,

the device being characterized in that at least one of the second dielectric layers, which is closest to the end facet of the resonant cavity, is made of niobium oxide] The semiconductor

By Cont'd  
laser device of claim 1, wherein the reflective film is formed by alternately laminating a plurality of first dielectric layers and a plurality of second dielectric layers containing niobium oxide.

---

12. (Currently amended) A method for fabricating a semiconductor laser device,  
[characterized by] said method comprising the steps of:  
[forming a resonant cavity structure by] sequentially depositing [a plurality of semiconductor layers] a n-type compound semiconductor layer, a resonant cavity, and a p-type compound semiconductor layer on a substrate;  
exposing an end facet of a resonant cavity [on the semiconductor layers] in an emitting direction by cleaving or etching the substrate [on which the semiconductor layers have been deposited]; and  
forming a reflective film [containing niobium oxide] composed of a first dielectric layer and a second dielectric layer containing niobium oxide on the exposed end facet of the resonant cavity.

BS  
13. (Currently amended) The method of Claim 12, [characterized in that] wherein the step of forming the reflective film includes the step of [forming the reflective film as a multilayer structure including a first dielectric layer with a refractive index smaller than that of niobium oxide and a second dielectric layer of niobium oxide] alternately depositing a plurality of first dielectric layers and a plurality of second dielectric layers containing niobium oxide.

---